LIST OF CONTENTS

NUMBER 1 JANUARY

● *EDITOR'S PAGES*

References 1

International System of Units 5

● *EDITORIAL*

Publication Time and Journal Content
Richard J. Vetter 9

● *PAPERS*

Mortality of Workers at the Hanford Site: 1945–1981
Ethel S. Gilbert, Gerald R. Petersen and Jeffrey A. Buchanan 11

Chernobyl Fallout on Alpine Glaciers
W. Ambach, W. Rehwald, M. Blumthaler, H. Eisner and P. Brunner 27

An Assessment of Soil-to-Plant Concentration Ratios for Some Natural Analogues of the Transuranic Elements
Paul Linsalata, Robert S. Morse, Helen Ford, Merril Eisenbud, Eduardo Penna Franca, Miriam B. de Castro, Nazyo Lobao, Ivanor Sachett and Marcia Carlos 33

Migration of Radionuclides Controlled by Several Different Migration Mechanisms Through a Sandy Soil Layer
Toshihiko Ohnuki and Tadao Tanaka 47

Sources For Pu in Near Surface Air
G. Hartmann, C. Thom and K. Bächmann 55

Bioassay α Spectrometry: Energy Resolution as a Function of Sample Source Preparation and Counting Geometry
Harold M. Ide, William D. Moss and Margaret A. Gautier 71

Practical Neutron Dosimetry with Superheated Drops
Robert E. Apfel and Yuan-Chyuan Lo 79

Epithelial Damage in Rabbit Corneas Exposed to CO_2 Laser Radiation
C. B. Bargeron, O. J. Deters, R. A. Farrell and R. L. McCally 85

● *NOTES*

Chernobyl Radioactivity in Turkish Tea
A. Gedikoğlu and B. L. Sipahi 97

Radiocesium Levels Measured in Breast Milk One Year After the Reactor Accident at Chernobyl
P. A. Assimakopoulos, K. G. Ioannides, A. A. Pakou, D. Lolis, K. Zikopoulos and B. Dusias 103

Estimation of Indoor ^{222}Rn from Concrete
Luis S. Quindos, George J. Newton and Marvin H. Wilkening 107

Estimation of the Mean Organ Doses and the Effective Dose Equivalent from Rando Phantom Measurements
V. Y. Golikov and V. V. Nikitin 111

● *CORRESPONDENCE*

Hormesis—A Dream Come True!
Bambino I. Martins 117

More on Very Low Radiation Doses
Robert E. Alexander 117

Warning from the A-Bomb Study about Low and Slow Radiation Exposures
John W. Gofman 117

● *BOOK REVIEW*

***Nuclear Accidents and Epidemiology*, Vol. 25 in the Environmental Health Series**
Reviewed by Anthony R. Benedetto 119

● *IRPA ABSTRACTS*

Twelfth Annual Conference of the Australian Radiation Protection Society 121

● *NEWS AND NOTICES* 125

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 133

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 135

● *INSTRUCTIONS TO CONTRIBUTORS* 137

● *NEW PATENTS* I

● *SOFTWARE SURVEY SECTION* III

● *ADVERTISER INDEX* Appears in the back of this issue

NUMBER 2 FEBRUARY

● *PAPERS*

Mortality and Career Radiation Doses for Workers at a Commercial Nuclear Power Plant: Feasibility Study
Robert Goldsmith, John D. Boice, Jr., Zdenek Hrubec, Paul E. Hurwitz, Thomas E. Goff and Jerome Wilson 139

Shielding Requirements for Constant-Potential Diagnostic X-ray Beams Determined by a Monte Carlo Calculation
Douglas J. Simpkin 151

A Review of the Dietary Uptake of Th
J. R. Johnson and E. S. Lamothe 165

Preliminary Experiences with ^{222}Rn Gas in Arizona Homes
Kimberlee J. Kearfott 169

Radon Concentrations in Five Pennsylvania Soils
John W. Luetzelschwab, Kelly L. Helweick and Krista A. Hurst 181

On Improving the Validity of Wire Screen "Unattached" Fraction Rn Daughter Measurements
Mukund Ramamurthi and Philip K. Hopke 189

Correlation Between Airborne U Exposure and U Urinalysis Results at Bear Creek Uranium
Gary R. Chase 195

Changes in Per Capita and Collective Dose Equivalent Due to Natural Radiation in Taiwan (1950–1983)
Tieh-Chi Chu, Pao-Shan Weng and Yu-Ming Lin 201

● *NOTES*

Some Effects of Radiation Dosimetry Errors on an Estimated Dose-Response Relationship
M. D. Morris and T. D. Jones 219

Essential Trace Metal Concentrations in Beagle Liver and Bone Tissue After Prolonged Zn-DTPA Treatment
Craig W. Jones, Charles W. Mays and Glenn N. Taylor 223

Radon Versus Rn Daughters
Hans Vanmarcke, Paul Berkvens and André Poffijn 229

Particle Size Distributions for Airborne Radionuclides in Ginna Steam Generator Work Environments
Frederick J. Mis, Steven B. Warren, Michael C. Harrison and Paul G. Voillequé 233

Transfer to Milk of ^{131}I and ^{137}Cs Released During the Chernobyl Reactor Accident
Bliss L. Tracy, William B. Walker and Richard G. McGregor 239

Cesium-137 Levels in Breast Milk and Placentae After Fallout from the Reactor Accident at Chernobyl
E. Gattavecchia, S. Ghini, D. Tonelli, G. Gori, G. Cama and E. Guerresi 245

Determining the Ratio of ^{239}Pu to ^{241}Am in Wounds by Measuring the L_γ X-rays with a Si (Li) Detector
H. E. Palmer and M. C. Rhoads 249

Accidental CT Scanning Without A1 Filtration and its Dosimetry
Terry T. Yoshizumi and Carl A. Chuprinko 253

● *CORRESPONDENCE*

Comment on 'A Histologic Study of the Influence of Cigarette Smoking in Suppressing Rn Daughter Carcinogenesis in Dogs'
Victor E. Archer 255

Reply to Dr. Archer's Comment on 'A Histologic Study of the Influence of Cigarette Smoking in Suppressing Rn Daughter Carcinogenesis in Dogs'
F. T. Cross, G. E. Dagle and R. A. Gies 256

Correction to BEIR IV Report
William H. Ellett 257

● *BOOK REVIEWS*

***Exposure of the Population in the United States and Canada from Natural Background Radiation*, Report No. 94 of the National Council on Radiation Protection and Measurements**
Reviewed by Anthony R. Benedetto 259

Ionizing Radiation: Protection and Dosimetry
Reviewed by William R. Hendee 259

● *NEWS AND NOTICES* 261

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 269

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 271

● *INSTRUCTIONS TO CONTRIBUTORS* 273

● *SOFTWARE SURVEY SECTION* I

MHPRADON

AUTO Q/C ASBESTOS/RADON STATISTICAL SYSTEM

AIRDOS-PC

● *ADVERTISER INDEX* Appears in the back of this issue

NUMBER 3 MARCH

● *EDITORIAL*

Health Physics Forum: A New Section in the Journal
Richard J. Vetter 275

1989 Annual Meeting of the National Council on Radiation Protection and Measurements 276

● *PAPERS*

Nuclear Medicine Staff and Patient Doses in Manitoba (1981–1985)
Walter Huda and Karin Gordon 277

Measurement of Neutron Leakage Spectra at a 500-MeV Proton Accelerator
Lutz E. Moritz 287

Exposure to Electromagnetic Fields in Arc Welding
M. A. Stuchly and D. W. Lecuyer 297

An Automated Dosimetry System for Microwave and Thermal Exposure of Biological Samples *in vitro*
Kenneth H. Joyner, Christopher C. Davis, Edward C. Elson, Ewa M. Czerska and Przemyslaw Czerski 303

Experimental Measurements of the Diffusion Coefficient of ^{212}Pb
Y. F. Su, G. J. Newton, Y. S. Cheng and H. C. Yeh 309

Concentrations of U and Po in Animal Feed Supplements, in Poultry Meat and in Eggs
T. Izak-Biran, T. Schlesinger, R. Weingarten, O. Even, Y. Shamai and M. Israeli 315

Quantitative Scanning Electron Microscopic Autoradiography of Inhaled $^{239}PuO_2$
C. L. Sanders, K. E. Lauhala and K. E. McDonald 321

Health Implications of Radionuclide Levels in Cattle Raised Near U Mining and Milling Facilities in Ambrosia Lake, New Mexico
Sandra C. Lapham, Jere B. Millard and Jonathan M. Samet 327

Utilization of Femoral Head for Estimating the Skeletal Burden of U and Pu in Humans
Narayani P. Singh, Laura L. Lewis and McDonald E. Wrenn 341

● *FORUM*

Role of the Public Sector in Prevention and Management of Radiation Accidents
Baruch Modan 345

● *NOTES*

Radon-222 Levels in Low Income Households
Bernard L. Cohen and Nickifor Gromicko 349

An Inexpensive and Practical Ambient-Temperature Vacuum Still for Bioassays
Daniel J. Strom and Kevin R. Bohner 355

Calibration of a Double Phoswich Detector Assembly for Estimation of Homogeneously or Inhomogeneously Distributed ^{241}Am and/or ^{239}Pu in Untreated Fecal Samples
Gary H. Kramer, Troy Diebert and James W. Leon 361

Usefulness of Water-Soluble Paper for Smear Test of Low-Energy β- and α-Emitters Using a Liquid Scintillation Technique
Makoto Takiue, Haruo Fujii, Tamaru Aburai and Hiroaki Ishikawa 367

Health Physics Activities in the Dismantling of a Radioactive Incinerator
Charles A. Pickering, Haro Der Hagopian and Victor N. Evdokimoff 373

● *CORRESPONDENCE*

Comment on 'Marble Attenuation Characteristics for Diagnostic x Rays'
M. A. Gomaa 377

Reply to Fisher's Comment: "Standard for Expression of Powers of 10"
Hub. Wijker 377

● *BOOK REVIEWS*

***Discovering Alvarez*, edited by W. Peter Trower**
Reviewed by Ralph H. Thomas 379

"Would the Insects Inherit the Earth?" and Other Subjects of Concern to Those Who Worry About Nuclear War, **compiled and edited by Jack C. Greene and Daniel J. Strom**
Reviewed by William J. Klenke 379

● *NEWS AND NOTICES* 381

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 391

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 393

● *INSTRUCTIONS TO CONTRIBUTORS* 395

● *NEW PATENTS* I

● *SOFTWARE SURVEY SECTION* III

STATIS 2

REF

● *ADVERTISER INDEX*

Appears in the back of this issue

NUMBER 4 APRIL

● *PAPERS*

Radiological Health Effects Models for Nuclear Power Plant Accident Consequence Analysis
John S. Evans and Dade W. Moeller 397

Radon Progeny Exposure and Lung Cancer Risk in New Mexico U Miners: A Case-Control Study
Jonathan M. Samet, Dorothy R. Pathak, Marion V. Morgan, Marian C. Marbury, Charles R. Key and Arnolfo A. Valdivia 415

Influence of Subsoil Geology and Construction Technique on Indoor Air ^{222}Rn Levels in 80 Houses of the Central Swiss Alps
R. Buchli and W. Burkart 423

Effects of Vegetation, a Clay Cap and Environmental Variables on ^{222}Rn Fluence Rate from Reclaimed U Mill Tailings
Randall C. Morris and Leslie Fraley, Jr. 431

The Accuracy of Some Simple Models for Predicting Particulate Interception and Retention in Agricultural Systems
J. E. Pinder III, K. W. McLeod and D. C. Adriano 441

Artificial Radioactivity in Fuel Peat and Peat Ash in Finland After the Chernobyl Accident
Raimo A. Mustonen, Auvo R. Reponen and Matti J. Jantunen 451

Cesium-137, ^{134}Cs and ^{110m}Ag in Lambs Grazing Pasture in NE Scotland Contaminated by Chernobyl Fallout
C. J. Martin, B. Heaton and J. Thompson 459

Environmental Radioactivity and Dose Evaluation in Taiwan After the Chernobyl Accident
Chien Chung 465

The Biological Half-Time of Radioactive Cs in Poikilothermic and Homeothermic Animals
H. Mailhot, R. H. Peters and R. J. Cornett 473

Influence of Age at Exposure on Concentrations of ^{239}Pu in Beagle Gonads
S. C. Miller, F. W. Bruenger and F. W. Williams 485

Energy Spectra of Electrons and Positrons Produced in Semi-Infinite and Infinite Water Phantoms Irradiated by Photons With Energies up to 1 GeV
M. L. Rustgi, L. N. Pandey, A. Kassaee and S. A. T. Long 493

Influence of Organs in the ICRP's Remainder on Effective Dose Equivalent Computed for Diagnostic Radiation Exposures
S. Julian Gibbs 515

Evaluation of Reproductive Function of Female Rats Exposed to Radiofrequency Fields (27.12 MHz) Near a Shortwave Diathermy Device
P. D. C. Brown-Woodman, J. A. Hadley, L. Richardson, D. Bright and D. Porter 521

● *NOTES*

Is Ionizing Radiation Regulated More Stringently Than Chemical Carcinogens?
Curtis C. Travis, Samantha Richter Pack and Holly A. Hattemer-Frey 527

Order of Magnitude Absorbed Dose Reductions in Cephalometric Radiography
Donald A. Tyndall 533

Thallium-201 in Human Milk: Observations and Radiological Consequences
Paul H. Murphy, Charles W. Beasley, Warren H. Moore and Michael G. Stabin 539

Effect of Smear Method on Detection of ^{99m}Tc Radiopharmaceuticals
Takao Kawano and Hiroshi Ebihara 543

Measuring the Skin Dose From Radioactively Contaminated Gold Rings Using LiF Thermoluminescent Powder
Christie R. Eheman, Matthew C. McFee, Susan M. Selden and Geoffrey G. Eichholz 547

Preparation and Performance of a $CaSO_4$:Dy, Tm Thermoluminescent Phosphor for Long-Term Gamma Measurements
Juan Azorín and Alicia Gutiérrez 551

Improved Cassette Recording of Multichannel Analyzer Data
Norman Latner and Norman Chiu 561

● *CORRESPONDENCE*

Personnel Monitoring in Diagnostic Radiology: Revisited—Again!
Stewart C. Bushong 565

A Plea for Sensible Film Badge Placement in Diagnostic Radiology
Libby Brateman 567

EDE for Exposure With Protective Aprons
E. W. Webster 568

Use of Effective Dose Equivalent for External Radiation Exposures
Charles B. Meinhold 570

Recommendations for Radioactive Waste Reduction in Biomedical/Academic Institutions
E. Party and E. L. Gershey 571

NRC, NCRP, ICRP and Recommendations on Prenatal Radiation Exposure
Bambino I. Martins 572

● *BOOK REVIEWS*

***Improving Dialogue With Communities,* by Billie J. Hance, Caron Chess and Peter M. Sandman**
Reviewed by William R. Hendee 575

***Basic Radiation Protection Technology,* by Daniel A. Gollnick**
Reviewed by David S. Gooden 575

***Neptunium: Radiation Protection Guidelines,* NCRP Report No. 90**
Reviewed by Anthony R. Benedetto 576

***Imaging Techniques in Biology and Medicine,* C. E. Swenberg and J. J. Conklin, editors**
Reviewed by William R. Hendee 576

***Advances in Radiation Biology:* Volume 12, J. T. Lett, K. I. Altman, U. K. Ehmann and A. B. Cox, editors**
Reviewed by William R. Hendee 577

***Advances in Radiation Biology:* Volume 13, J. T. Lett, U. K. Ehmann and A. B. Cox, editors**
Reviewed by William R. Hendee 577

***Radiochemistry of Carbon, Nitrogen and Oxygen,* by M. Sajjad and R. M. Lambrecht**
Reviewed by Geoffrey G. Eichholz 577

***Radiochemical Neutron Activation Analysis for 36 Elements in Geological Material,* by E. Anders, R. Wolf, J. W. Morgan, M. Ebihara, A. B. Woodrow, M. J. Janssens and J. Hertogen**
Reviewed by Geoffrey G. Eichholz 578

● *IRPA ABSTRACTS*

Annual Conference of the Canadian Radiation Protection Association 579

● *NEWS AND NOTICES* 587

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 597

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 599

● *INSTRUCTIONS TO CONTRIBUTORS* 601

● *NEW PATENTS* I

● *SOFTWARE SURVEY SECTION* III

● *ADVERTISER INDEX* Appears in the back of this issue

NUMBER 5 MAY

Special Issue
Proceedings of the First Symposium on the Biological Effects, Hazards and Protection from Non-ionizing Radiation in Outdoor Applications

● *PREFACE*

Non-ionizing Radiation in Outdoor Applications
Björn M. Tengroth 603

● *CHARACTERISTICS OF LASER OUTPUT*

Laser Output Characteristics
Reginald Birngruber 605

● *BIOPHYSICS OF LASER-TISSUE INTERACTION*

Laser Radiation Tissue Interaction
Franz Hillenkamp 613

● *LASER AND LIGHT EFFECTS UPON THE RETINA*

Structural Aspects of Laser-induced Damage and Their Functional Implications
John Marshall 617

Retinal Damage From Intense Visible Light
G. Zheltov, V. Glazkov, A. Podol'tzef, L. Linnik and A. Privalov 625

Near Infrared Laser Ocular Bioeffects
David J. Lund and Edwin S. Beatrice 631

Retinal Damage Thresholds From Single-pulse Laser Exposures in the Visible Spectrum
D. Courant, L. Court, B. Abadie and B. Brouillet 637

Clinical, Pathological and Photochemical Studies of Laser Injury of the Retina
Cai Yong-shu, Xu Du and Mo Xie 643

Experimental Studies of the Injurious Effects of Q-switched Nd:YAG Lasers and Their Outdoor Applications
Xu Jiemin, Xu Guidiao, Chen Zhongli, Shi Liangshun, Hu Fugen, Zhou Shuying, Qian Huanwen, Zhang Guisu, Wang Denglong, Liu Haifeng, Gao Guanghuang and Wu Dechang 647

Preliminary Notes on Vulnerability of the Retina to Injury From Peripheral Laser Exposure Conditions
B. Anderberg, G. Bolander, B. Sjölund, O. Steinwall and B. Tengroth 653

Visual Functional Changes Associated with Low-level Light Effects
Harry Zwick 657

Glare in Aviation
D. H. Brennan 665

● *PHOTOCHEMICAL EFFECTS UPON THE CORNEA, SKIN AND OTHER TISSUES*

Ultraviolet-induced Photochemical Damage in Ocular Tissues
Joseph A. Zuclich 671

Damage Thresholds of Skin Irradiated by Ultraviolet Lasers
Li Zhao-zhang, Wu Jia-nu, Gai Bao-kong, Zhou Yan and Zhou Zhen-zhuo 683

New Biological Phenomena Associated With Laser Radiation
Michael Belkin and Michal Schwartz 687

Photobiology of Low-power Laser Effects
Tiina Karu 691

● *LASER ACCIDENT EXPERIENCES*

Clinical Observations of Six Cases of Laser Injury to the Eye
V.-P. Gabel, R. Birngruber, B. Lorenz and G. K. Lang 705

Ocular Injuries From Accidental Laser Exposure
Liu Haifeng, Gao Guanghuang, Wu Dechang, Xu Guidao, Shi Liangshun, Xu Jiemin and Wang Haibiao 711

● *LASER SAFETY STANDARDS AND MEASUREMENT TECHNIQUES*

Radiometry and Laser Safety Standards
David H. Sliney 717

A Laser Radiation Occupational Health Standard for the People's Republic of China
Li Zhao-zhang and Xu Song-lin 725

● *LASER EYE PROTECTION*

Evaluation of Ocular Protection Filters in Field Situations
M. L. Wolbarsht and A. J. Welch 729

Measurements of Laser Eye Protective Filters
Paul Eriksen and Penelope K. Galoff 741

● *EVALUATION OF LASER HAZARDS IN THE OUTDOOR ENVIRONMENT*

Vulnerability of the Retina to Injury From a Military Ruby Rangefinder at Battlefield Distances
B. Anderberg, B. Sjölund, G. Bolander, O. Steinvall and B. Tengroth 743

New Philosophies in Control of Laser Hazards in the Outdoors
James K. Franks 749

Laser Reflections From Relatively Flat Specular Surfaces
Wesley J. Marshall 753

● *MICROWAVE BIOLOGICAL EFFECTS AND SAFETY ISSUES*

Radio-microwave Interactions with Biological Materials
Frank S. Barnes 759

Microwave Attenuation of Ethanol-induced Interactions with Noradrenergic Neurotransmitter Systems
Dennis L. Hjeresen, Albert Francendese and James M. O'Donnell 767

Microwave Effects on the Central Nervous System—A Study of Radar Mechanics
Ralph Nilsson, Yngve Hamnerius, Kjell Hansson Mild, Hans-Arne Hansson, Elisabeth Hjelmqvist, Staffan Olanders and Lennart I. Persson 777

Damage Criteria for Determining Microwave Exposure
B. Servantie 781

● *NEWS AND NOTICES* 787

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 797

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 799

● *INSTRUCTIONS TO CONTRIBUTORS* 801

● *SOFTWARE SURVEY SECTION* I

● *ADVERTISER INDEX* Appears in the back of this issue

NUMBER 6 JUNE

● *AWARD PRESENTATIONS*

1988 Distinguished Scientific Achievement Award—Marvin Goldman
Citation by Lynn R. Anspaugh 803

1988 Distinguished Scientific Achievement Award—Charles W. Mays
Citation by Darrell R. Fisher and Ronald L. Kathren 807

1988 Founders Award—Francis J. Bradley
Citation by Herman Cember 811

1988 Elda E. Anderson Award—John R. Frazier
Citation by William L. Beck 813

● *OBITUARIES*

William P. Swanson (1931–1988)
Citation by Joseph B. McCaslin and Ralph H. Thomas 817

William B. Johnson (1919–1989) 819

● *REVIEW ARTICLE*

Symptomatology of Acute Radiation Effects in Humans After Exposure to Doses of 0.5–30 Gy
George H. Anno, Siegmund J. Baum, H. Rodney Withers and Robert W. Young 821

● *PAPERS*

Chelation of ^{238}Pu(IV) *in vivo* by 3,4,3-LICAM(C): Effects of Ligand Methylation and pH
Patricia W. Durbin, David L. White, Nylan Jeung, Frederick L. Weitl, Linda C. Uhlir, E. Sarah Jones, Fred W. Bruenger and Kenneth N. Raymond 839

A Microcomputer Algorithm for Solving First-Order Compartmental Models Involving Recycling
A. Birchall and A. C. James 857

Dose-modification Factor for Accumulated Dose to Cell Nucleus due to Protein-Bound ^{3}H
M. Saito, M. R. Ishida and C. C. Travis 869

Cancer Mortality Around La Hague Nuclear Facilities
M. Dousset 875

Estimation of the Quality Factor on the Basis of Multi-event Microdosimetric Distributions
M. Zaider and H. H. Rossi 885

Technique-dependent Decrease in Thyroid Absorbed Dose for Dental Radiography
R. E. Wood, R. G. Bristow, G. M. Clark, C. Nussbaum and K. W. Taylor 893

Doses to Patients from Dental Radiology in France
M. Benedittini, C. Maccia, C. Lefaure and F. Fagnani 903

Effectiveness of Skin Absorption of Tincture of I in Blocking Radioiodine from the Human Thyroid Gland
Kenneth L. Miller, Patricia E. Coen, William J. White, W. Jeffrey Hurst, Bryan E. Achey and C. Max Lang 911

Health Physics Measurement on Princeton Tokamaks, 1977–1987
J. R. Stencel, J. D. Gilbert, J. G. Couch, O. A. Griesbach, J. J. Fennimore and J. M. Greco 915

● *FORUM*

How Science Can Contribute to the Legal Process
Ray D. Lloyd and John A. Auxier 929

● *NOTES*

The Effect of Dose Rate on Radiation Injury
A. A. Broyles 933

Reducing Radiation from Brachytherapy Patients with a Cost-effective Bedshield
Robert E. Black and Kerry J. Stehlik 939

An Empirical Model for x-ray Attenuation in Pb and Mild Steel
A. A. Okunade and L. A. Hussain 943

Neutron Dose Equivalent Outside the Lateral Shielding of an Electron Linear Accelerator Operating at 0.48–2.15 GeV
Hideo Hirayama and Syuichi Ban 947

Measurements of Ozone, Oxides of N and Nitric Acid Produced in the Tunnel of a High-energy Electron Storage Ring
Yukio Kanda, Masafumi Taira, Kenjiro Kondo and Taichi Miura 953

● *CORRESPONDENCE*

Dose Levels of Medical Exposure from Diagnostic x-ray Procedures in Beijing, China
Zheng Jun-zheng 957

Radiation Cancer Risks: Who is Ordained to Speak for Science?
Rudi H. Nussbaum 958

Peer Review and Scientific Consensus in Radiation Cancer Assessment
A. Alan Moghissi and Dixy Lee Ray 959

New Data Inconsistent with 'Scientific Consensus' on Low-level Radiation Cancer Risks
Rudi H. Nussbaum 961

Use of Liquid vs. Capsule Form ^{131}I
Robert H. Wallace 963

Reply to 'Use of Liquid vs. Capsule Form ^{131}I'
Douglas R. Shearer, Glenn L. Donovan and Marleen M. Moore 963

The Effect of Low-level Radiation
Karl Z. Morgan 964

Reply to Morgan: Exaggeration of Radiation Risk is a Disservice to Environmental Protection
A. Alan Moghissi and Dixy Lee Ray 964

● *BOOK REVIEWS*

***Radiation Dose to Patients from Radiopharmaceuticals,* ICRP Publication No. 53**
Reviewed by Bryan Westerman 967

***Protection of the Patient in Nuclear Medicine,* ICRP Publication No. 52**
Reviewed by Anthony R. Benedetto 967

***Patient Dosimetry Techniques in Diagnostic Radiology* by B. F. Wall, R. M. Harrison and F. W. Spiers**
Reviewed by James J. Vucich and Thomas C. Fearon 968

Use of Laboratory Animals in Biomedical and Behavioral Research
Reviewed by Jerod M. Loeb 968

***Nuclear Energy* by Raymond L. Murray**
Reviewed by William R. Hendee 969

***Monte Carlo Simulation in the Radiological Sciences,* edited by R. L. Morin**
Reviewed by Geoffrey G. Eichholz 969

***Environmental Radon,* edited by C. Richard Cothern and James E. Smith, Jr.**
Reviewed by William R. Hendee 969

***Chernobyl: The Real Story* by Richard F. Mould**
Reviewed by William R. Hendee 970

● *IRPA/INIRC GUIDELINES*

Proposed Change to the IRPA 1985 Guidelines on Limits of Exposure to Ultraviolet Radiation 971

● *ERRATA*

Correction for: Radiation Safety in Commercial Air Traffic: A Need for Further Study. Health Phys. 55:1001–1003; 1988. 973

Correction for: A Simple Approximation for Estimating Centerline γ Absorbed Dose Rates Due to a Continuous Gaussian Plume. Health Phys. 53:143–146; 1987. 974

Correction for: Hazards Assessment of Worst Case Transportation Accidents Involving Typical Radioactive Material Shipments. Health Phys. 55:963–983; 1988. 974

● *NEWS AND NOTICES* 975

● *HEALTH PHYSICS SOCIETY PROSPECTUS* 985

● *HEALTH PHYSICS SOCIETY AFFILIATE MEMBERS* 987

● *INSTRUCTIONS TO CONTRIBUTORS* 989

● *LIST OF CONTENTS FOR VOL. 56* I

● *AUTHOR INDEX FOR VOL. 56* XVII

● *SUBJECT INDEX FOR VOL. 56* XX

● *NEW PATENTS* XLIII

● *SOFTWARE SURVEY SECTION* XLV

● *ADVERTISER INDEX* Appears in the back of this issue